



U.S. Department  
of Transportation

**Research and  
Special Programs  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

DEC 21 2000

DOT-E 8523  
(THIRD REVISION)

EXPIRATION DATE: November 30, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Arbel-Fauvet-Rail (AFR), Paris, France  
(U.S. Agent: Mary-Hoyt-Joyce  
Chevy Chase, Maryland)

(See Appendix A of this document for a list of additional grantees)

2. PURPOSE AND LIMITATION:

- a. This exemption authorizes the transportation in commerce of certain Division 2.1 and 2.2 materials in a non-DOT specification IMO Type 5 portable tank. This exemption provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.
- b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.304 and 173.315 except as specified herein.

5. BASIS: This exemption is based on the application of Arbel-Fravet-Rail dated November 8, 2000, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Ammonia, anhydrous	2.3	UN1005	N/A
Butane	2.1	UN1011	N/A
Chlorodifluoromethane and chloropentafluoroethane mixture or Refrigerant gas, R 502 with <i>fixed boiling point, with approximately 49 percent chlorodifluoromethane</i>	2.2	UN1973	N/A
Chlorodifluoromethane or Refrigerant gas R 22	2.2	UN1018	N/A
Chloropentafluoroethane or Refrigerant gas R 115	2.2	UN1020	N/A
Dichlorodifluoromethane or Refrigerant gas R 12	2.2	UN1028	N/A
Dichlorodifluoromethane and difluoroethane azeotropic mixture or Refrigerant gas, R 500 with approximate 74 percent dichlorodifluoromethane	2.2	UN2602	N/A
Isobutane	2.1	UN1969	N/A
Methyl chloride or Refrigerant gas R 40	2.1	UN1063	N/A
Propane	2.1	UN1978	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packagings are non-DOT specification portable tanks, mounted in ISO frames, designed and constructed in accordance with Fauvet-Girel drawing C0166609, Rev. A., technical specifications and calculations on file with the Office of Hazardous Materials Exemptions and Approvals (OHMEA), and in compliance with the following:

- (1) Code-Complies with ASME Code (not marked)
  - (2) Insulation-none
  - (3) Water Capacity (U.S. Gallons) - 4,385
  - (4) Material-steel A52FP - French Standard A36205
  - (5) Tank size (inches) (outside dia) X (length) X (thickness)  
78.74 230.72 0.6614  
Head Thickness-0.6654  
Weld Joint Efficiency-1.0  
Corrosion Allowance-0.0
  - (6) Design Pressure (PSIG)-336.6  
Note: Design pressure means "maximum allowable working pressure (MAWP)" as used in the ASME Code.
  - (7) Test Pressure, Minimum (PSIG)-504.9
  - (8) Openings - One - 3 inch safety device pad on top of One - 18-1/2 inch manhole in the head; One - 4 inch liquid phase and one - 4 inch gas phase outlet with quick closing valves in the bottom.
  - (9) Tank surface area (square feet)-419
  - (10) Safety Relief Devices-Two 2-1/2 inch safety relief valves in series with and outboard of one-3 inch rupture disc all set at 336.6. psig. Relief valve capacity is 1,530,000 SCFH.
- Note: The relief device capacity represents 80% of the rated capacity of the two safety relief valves in accordance with paragraph UG-127 of Section VIII Division 1 of the ASME Code. The actual capacity of the relief device may be determined by the test procedure of paragraph UG-132 of the ASME Code. The set pressure of the relief device may not exceed the 110% MAWP (see § 173.315(i)(3)).
- (11) G-Loadings: Vertical down 2; Vertical up 1; Longitudinal 2; and Transverse 1.
  - (12) Maximum Gross Weight (pounds)-61,729

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(13) Maximum Commodity Weight (pounds)-45,199

(14) Tare Weight (pounds)-16,530

(15) Design Specific Gravity-1.24

(16) Maximum Specific Gravity-1.54

b. TESTING -

1. Hydrostatic test certificates for each tank must be kept on file by the manufacturer at its principal business office and be made available to OHMEA upon request.

2. Each tank must be (a) visually inspected prior to each trip to insure that it has not been damaged on the previous trip; and (b) visually inspected at least once every 2-1/2 years in accordance with the provisions of § 177.824; and (c) pressure tested at least once every 5 years at one and one-half times the design pressure.

c. OPERATIONAL CONTROLS -

1. Each portable tank must be plainly marked on both sides near the middle, in letters at least two inches high on contrasting background, "DOT-E 8523".

2. No product may be shipped that has venting requirements exceeding 1,530,000 SCFH, or has a specific gravity greater than 1.54. The venting capacity required for each product must be determined by the flow formulas contained in Compressed Gas Association (CGA) pamphlet S-1.2.

3. The tank must be filled so as not be liquid full at less than or equal to 130°F.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

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9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight and cargo vessel.
10. MODAL REQUIREMENTS:
- a. A current copy of this exemption must be carried aboard each cargo vessel and motor vehicle used to transport packages covered by this exemption.
  - b. Portable tanks may not be transported in container-on-flat car (COFC) or trailer-on-flat car (TOFC) service except under conditions approved by the Associate Administrator for Safety, Federal Railroad Administration.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
  - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS:
- a. The owner of the tanks covered by this exemption must provide to the OHMEA a list of all shippers who shipped under this exemption and a shipping experience report every six months from the effective date of this exemption. The shipping experience report must contain approximate number of shipments made during the previous six months and any difficulties encountered.
  - b. The holder of this exemption, as identified in paragraph 1 above, must contact the OHMEA immediately after

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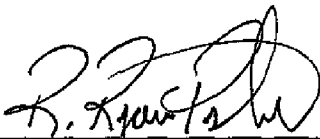
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any of the tanks covered by this exemption are sold to another party.

c. Shippers who ship under the terms of this exemption must report any incident involving loss of contents of the tanks described herein to the OHMEA as soon as practicable.

Issued in Washington, D.C.:



*for* Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

DEC 21 2000  
(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.  
Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, S.W., Washington, DC 20590-0001, Attention: Records Center, 202-366-5046.

PO: sln


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The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
Compagnie Des Containers Reservoirs, Paris, France. (U.S. Agent: ERMEWA, Inc. Houston, TX)	Sep 25, 1998	2/8/99	Jan 31, 2001
Dehon Service Bry-sur-marne, France (U.S. Agent: Mary-Hoyt- Joyce, Chevy Chase, MD)	11/8/00	DEC 21 2000	11/30/02

  
for Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety